

REMARKS/ARGUMENTS

Applicant responds herein to the Office Action dated August 11, 2006.

Claims 1-17 are pending in the instant application. Claim 8 has been withdrawn from consideration pursuant to Examiner's Restriction Requirement, and Applicant's election. In the most recent Office Action claims 3-6 and 11 are rejected under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with the enablement requirement. Claims 1-4, 7 and 9-17 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by US Patent No. 6,084,843 to Abe, *et al.* ("Abe"). Claims 5-6 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over Abe in view of Applicant's alleged admitted prior art. Applicant respectfully traverses all rejections for at least the reasons set forth below.

As amended above the claims recite aberration correction optical elements, more specifically correction optical elements which correct light aberration caused by factors such as manufacturing and adjustment errors of the optical elements. These amendments to the claims are fully supported in the original specification as filed for example at, among other places, page 2, line 6-7.

Turning to the rejection under § 112, first paragraph, the specification describes, for example beginning at p. 48, line 20 and continuing through p. 54, line 3, the nature and correction of an arrow aberration. That description, together with accompanying Figures 9A-9H, in text and illustration describe the nature of an arrow aberration and its correction. In light of this disclosure, Applicant respectfully submits that no experimentation is necessary on the part of one skilled in the art to make or use the present invention as recited in claims 3-6 and 11. Also, the definition of "arrow aberration" is provided in "Optics", pp. 320 (Hiroshi Kubota, Iwanami Shoten, 8-31-1964). Applicant kindly requests favorable reconsideration and withdrawal of the rejection.

Turning to the applied references, the Office Action does not address the feature recited in claim 12 comprising a step of measuring aberration generated in a light path within the optical system, nor the feature of amended claims 1 and 12 noted above. In light of this deficiency of the reference relative to the claims, structure and function of Abe is entirely distinguishable from the claimed invention. Abe is concerned with the use of a single optical reading and recording head for different types of optical recording media, i.e. CD and DVD. To account for differences in thickness and index of refraction in these two different media types, Abe uses two separate light sources producing

differing wavelengths of light, with one positioned on an optical axis and one offset from it. In order to accommodate the different wavelengths and offset position of the two light sources, an optical element (25) includes a compound correction for both spherical and coma aberration. However, in contrast to the claimed invention, the aberration is not measured for the purpose of correction. Rather, the aberration is specifically induced to accommodate two media each having a separate light source.

Additionally, it is significant to consider that the aberration optical elements of the present invention correct aberrations caused by manufacturing error and adjustment error of optical components as described in amended claims 1 and 12. The kind, sign and amount of aberrations are not determined in advance, and are different among optical heads. To correct such aberrations, it is necessary to prepare a plurality of types of elements corresponding to aberrations of different types, signs and amounts, select an optimal element according to type, sign and amount of actual aberration, and insert the selected element in the optical system.

On the other hand, the Abe reference describes HOE 25 that corrects coma aberration and spherical aberration. However, coma aberration is caused by the laser element 21A positioned out of the optical axis, and spherical aberration is caused by a difference in substrate thickness between a DVD and a CD. Namely, the sign and amount of the coma aberration and spherical aberration are determined in advance. To correct these aberrations, a single element suitable for the kind, sign and amount of aberration determined in advance is prepared and inserted in the optical system.

As described above, the HOE 25 of the Abe reference corrects aberration whose kind, sign and amount are determined in advance, and it is not possible to correct aberration caused by a manufacturing error or adjustment error of an optical component by using this element.

Therefore, the present invention could not have been easily conceived based on the Abe reference and clearly distinguishes over the prior art.

It has been held by the courts that “anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.” *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Company, et al.*, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984). Therefore, because Abe does not teach or suggest all elements recited in at least independent claims 1 and 12, Applicant respectfully submits that these

claims are patentably distinguished, and kindly requests favorable reconsideration and withdrawal. Claims 2-11 and 13-17 each depend, either directly or indirectly, from independent claims 1 or 12. These dependent claims are each separately patentable, but are offered as patentable for at least the same reasons as their underlying independent base claims.


Turning to the rejection of claims 5 and 6 as allegedly obvious over Abe in view of Applicant's alleged admitted prior art, the proposed modification of Abe, even presuming that there exists some motivation for one of ordinary skill in the art to modify Abe as proposed, does not ameliorate the underlying deficiencies of Abe with respect to independent claim 1, as noted above. Moreover, it has been held by the courts that to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Therefore, Applicant respectfully submits that claims 5 and 6 are further patentably distinguished and kindly requests favorable reconsideration and withdrawal of the rejection.

In light of the foregoing, Applicant respectfully submits that all claims recite patentable subject matter. In the interest of brevity, Applicant has addressed only so much of the rejections as is considered sufficient to demonstrate the patentability of all claims. Applicant's failure to address any portion of the rejections should not be construed as an acquiescence in the propriety of any portion not addressed. Applicant maintains that the claims are patentable for reasons other than those specifically discussed *supra*.

Accordingly, the Examiner is respectfully requested to reconsider the application, allow the claims as amended and pass this case to issue. If the Examiner has any reservation in allowing the claims, and believes that a telephone interview would advance prosecution, he is kindly requested to telephone the undersigned at his earliest convenience.

Respectfully submitted,

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